

## **The Plight of Patients with Lupus Nephritis in Wuhan, China**

Cheng Chen, Biqing Yao, Miao Yan, Ke Su, Huiming Wang and Chuanhui Xu

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**Dr. Earl Silverman (ES):** Hi, I'm Earl Silverman, editor-in-chief of *The Journal of Rheumatology*. I hope you're all doing well and healthy during the coronavirus pandemic. Today, I'm pleased to be speaking to Dr. Chuanhui Xu, who is a rheumatologist at the Tan Tock Seng Hospital in Singapore.

Dr. Xu, along with Drs. Chen, Yao, Yan, Su, and Wang of the Renmin Hospital at the Wuhan University, are the authors of a letter to the editor of original data entitled "The Plight of Patients with Lupus Nephritis in Wuhan, China," which is now available via open access on The Journal's website at [www.jrheum.org](http://www.jrheum.org).

Dr. Xu, I want to thank you and your colleagues in Wuhan for writing your letter and for joining me in agreeing to discuss how this SARS-CoV-2 pandemic affected healthcare in patients with lupus nephritis in Wuhan, China.

**Chuanhui Xu (CX):** Thank you so much for having me for the interview. I wish you are also doing well now.

**ES:** Things are okay. We're in a lockdown. I see all my patients from home. We don't see patients in the hospital. We'll get to that, but we do it all by either telephone or via virtual visits, similar to what we're doing now, only in a better secured system.

**CX:** I think we here have a similar experience nowadays globally.

**ES:** Yeah, I think so.

So my first question for you is, do you know what the situation now is in the patients in Wuhan as compared to when you wrote the letter? Specifically, how do they see patients now and how are you seeing patients in Singapore?

**CX:** So, you know, that study was carried out in March 2020. The lockdown of Wuhan City was officially lifted in early April. It has been almost two months since then.

I just had a discussion with our first author, Dr. Cheng Chen, who unfortunately is not able to attend the interview. She told me the outpatient clinic visits has been normalized and most of her patients had been back to hospital regularly. She had a full clinic today, the whole day.

At least, there are no more patients discontinuing the medication, as we mentioned in the manuscript, due to the limited access to medical care.

Another thing I want to share with you is that there was a universal screen for all residents in Wuhan. About 9 million of the population within 10 days, all of them were screened for COVID-19 by PCR recently. So the good news is there are about 200 asymmetrical cases were identified. The other ones, they are less than one asymmetrical COVID-19 patients out of 10,000 population in Wuhan City nowadays.

The COVID-19 situation is almost controlled in Wuhan, and the situation has been back to normal nowadays.

In Singapore, the cases actually also are coming down. We are seeing less COVID-19 patients now. I hope it's getting better in the coming weeks.

**ES:** Well, that's great. Did I hear you right that they screened 9 million people by PCR in 10 days?

**CX:** Yeah, that's right. Very impressive. They screened all the 9 million residents within 10 days.

**ES:** That's unbelievable! Canada, we have, I don't know, 35 million people. My province that I live in, Ontario, we probably have 10–11 million and we're only capable, today, I think of under 20,000 a day in the whole province, not in a single city. So that's fantastic. I think that's the only way to get it under control.

As I said, I'm staggered by the number, but that's sort of seems the way China works. When they put their mind to something, they go head on.

**CX:** Yeah, they're doing a great job.

They have their own strategy. You know they initially mixed the sample, they screen ten samples as one sample, so they do the positive sample again if it turns out to be positive.

**ES:** I heard about that. That's a great way to do it. That way you can screen ten, a hundred, and then you just go back. That's great.

So, second question I have is, when I read the letter, it was striking to me that 25% of the patients in Wuhan, of nephritis patients, had discontinued their medication. Why do you think that was? Was that because they couldn't go to pharmacies? The lockdown was that much? Did they just run out of medications? Or did people stop medications because they were worried?

**CX:** Actually, when we do the survey for the patients who discontinue the medication, we especially make a phone call again to ask them what's the reason they stopped the medication. Almost half of the patients did so due to the limited access to healthcare. Of course, there are a few cases due to the side effects, also a few cases they stopped because they are very worried. They are concerned about the side effects and also the potential increasing risk of infection of COVID-19 when they're taking the immunosuppressants, which may not be true.

So the surge of the outbreak placed a tremendous pressure on the city's healthcare system in January or February this year. As Dr. Cheng Chen mentioned to me, the nephrology clinical was closed. Only emergency clinics of oncology and the Hemodialysis Center was still open in Renmin Hospital of Wuhan University. Most of the healthcare staff was deployed to supportive care of patients with COVID-19, including the co-authors in this paper.

Also, the public transportation was collapsed during the lockdown of Wuhan. Only ambulance and other public service were available to transport patients. And in addition, most of the patients, actually, they are extremely scared and reluctant to come to hospital. We know this is unprecedented.

Subsequently, there are a total of about 300 medical team, was deployed to Wuhan and other cities in Hubei, involving almost 40,000 healthcare staff from other provinces around China.

The situation was only better in March when we started this survey. Actually, the reason we started this survey is to try to investigate how, whether patients with lupus in the area of the pandemic, many of them may not necessarily contract SARS-CoV-2, but more likely, they were affected by the societal lockdown or quarantine or the inaccessibility to healthcare.

So from this study, we advocate that such vulnerable patients, lupus patients, are in need of some guidance to adjust their medication and also the assistance to access healthcare and so on.

Actually, we are very glad to see there are a lot of efforts nowadays to address this issue for different societies.

For instance, as I know, we can see at the COVID-19 Global Rheumatology Alliance Project. They are collecting and analyzing, disseminating the information about COVID-19 in rheumatology to patients, and also to physicians and other relevant groups to improve the care of patients.

There are also much more for other sorts of countries including Singapore.

**ES:** Well, that's great...

**CX:** I'm sorry, I cannot hear clearly.

**ES:** I'm sorry... Better?

Yeah, I was saying that it's very encouraging that people are working internationally because no country even has enough patients to get the data.

So the next question, it also struck me that of the 25 patients who stopped their medication, within a short period of time, maybe two months, 5 flared. Have more, do you know if any more patients flare after stopping medication?

**CX:** Oh, our study is a very small cohort. We only get 100 patients who answered the questionnaires.

I'm very sure it's only the iceberg of patients with rheumatic disease affected by the COVID-19 pandemic in Wuhan, I think which warrants more study.

Originally, there's one publication in *Annals of Rheumatic Diseases* from another team in Wuhan entitled, "Clinical Features of Rheumatic Patients Infected with COVID-19 in Wuhan, China." Data was collected from about 2000 patients diagnosed with COVID-19 in one hospital in Wuhan. There were 21 cases with rheumatic disease, and among them, there are four patients had a digit flare during hospitalization. I wouldn't be surprised if there are more patients who have flared.

**ES:** Right. Yeah, I know. It's one of the things we worried about. So what's the situation now in Singapore? You mentioned that Wuhan is really getting back to normal. How are things in Singapore and how are you seeing patients today?

**CX:** In the last few months, we are also doing the, in Singapore, they call it the circuit breaker. Most of the people actually are staying at home and we are still seeing patients regularly. The city lockdown in Wuhan was very sudden and unprecedented, in January. Neither physicians nor patients were prepared.

Since early January, Singapore actually was alerted and preparing for the outbreak COVID-19. The specialty clinic in my hospital was relatively better prepared, in Tan Tock Seng Hospital in Singapore. So immediately after the lockdown of Wuhan, our outpatient appointments were massively reshuffled so that stable patients with low-dose immunosuppressants were contacted. The appointments were therefore deferred, and the medicines were topped up if they remain well. Therefore, the discontinuation of healthcare was therefore minimized.

I think it's very vital to learn the lesson from the lockdown of Wuhan for patients with chronic disease, especially the patients with rheumatic disease and some patients with cancer. I think we have to learn the way how to take care of these patients.

**ES:** Yes, so, in one of the editorials that we have published recently, we've talked about, certainly, in Canada and the US, we are seeing patients virtually, similarly to the way I'm talking to you, I see all my lupus patients this way. They will go out to get blood tests, which are booked in advance. They only have one person in the waiting room, the pharmacy similarly will allow only 1 or 2 people in.

So, we haven't seen this. It's really interesting. Luckily in the province I live in because it's — we only have 10 or 11, 12 million people, which is like a small city in China, and in the whole province, and it's

really big, we already had a way to see patients who are far away. So, there was already a secure network that the government had set up, so we tapped into that right away.

So we were lucky that we had these ways of seeing patients that were based on the distances people had to travel. Anyway, and similarly, many centers in the United States were geared up to do this, and what's interesting to me, and we'll see what happens in other countries, patients love this. They don't have to travel. So their whole visit takes a half-hour rather than a half-hour even just getting to the hospital, rather than a half a day. So, they like this, this virtual visit. Have you had much experience with this in your patients, like it or not like it, or you haven't really done that?

**CX:** I think it's very good that we can share the experience in different countries. We know it's a crisis for humankind now, but it's also an opportunity for us to look again at our healthcare system and to explore different ways to take care of patients. I think we should never waste a crisis.

I think telemedicine, as you mentioned, either via telephone or video — all this is adopted and pushed forward in many countries.

In our study, as you noticed, there were about 13 patients consulted online. The online consultations are actually being more and more accepted by patients and physicians in China now. There were about 40,000 healthcare staff who were physically deployed to support Hubei, including Wuhan. Actually, more healthcare staff, they joined online to do consultation service for free during the search of COVID-19 in China.

When the COVID-19 was controlled in the end of March in China, but actually was rapidly spreading globally. So Alibaba, which was started by Jack Ma, they provided a platform for Chinese doctors to offer help for Chinese people overseas, to provide the experience from China and to provide a free, online consultation for people.

In Singapore, actually, we are also exploring care by telemedicine. It's encouraged by the government and the Ministry of Health in Singapore. Of course, I think the limits of telemedicine should not be neglected. I think the patient's safety always come first.

**ES:** You know, there's a saying in English, I don't know if it's the same in Mandarin: "When you have lemons, make lemonade." So that's what we're saying. When something bad happens, turn it into something good.

**CX:** I think we have a similar saying in Mandarin as well.

**ES:** Yeah, has to be. One last question for you, in many countries, and there were just talked about this, about the telemedicine. So really, I think it may change how we practice medicine, and I really want to thank you.

Are there any final points should maybe I missed that you'd like to make about either your experience in Singapore, the experience in Wuhan, or about the letter itself that we may have missed, that you'd like to highlight for the people who are listening?

**CX:** Generally speaking, the pandemic of COVID-19 is unprecedented. No one would expect it would become so bad, and it last for so long. I think it's now time for us to learn from each other and to share the different experience. Wuhan in China, they had a very bad situation, but they went through it. Now it's time, I think, for us to learn from their lessons.

I think now also, for us to share our experience in Singapore and in Canada, in US, or in UK. In terms of technology or telemedicine, I think we should be open minded to explore it.

**ES:** I agree, and I think, as I said, this could be a great opportunity to improve patient care, patient satisfaction with delivery. My colleagues and I have discussed, maybe every other visit in the future would be telemedicine and we've learned how to get by without touching patients.

I think one of the things we love about being a physician, especially rheumatologists, is actually that personal contact, that interaction touching with patients. I think we can't get away with that, but maybe less in-person visits and patients, as I said, seem to really like it and I'm sure everything will turn back.

So I really want to thank you for taking your time, especially because it's after nine in the evening in Singapore, and providing very interesting enlightened conversation and for writing this very interesting research letter regarding the experience and Wuhan early on.

I invite everybody to please read the letter to the editor entitled "The Plight of Patients with Lupus Nephritis in Wuhan, China," as well as our other editorials, letters to the editor, and articles about the SARS-CoV-2 infection and COVID-19 itself, and its effects and its implications for rheumatologists and rheumatology practices. You can read this at [www.jrheum.org/covid19](http://www.jrheum.org/covid19).

If you have any questions or comments, please send them to us via Twitter @jrheum or e-mail us at [manuscripts@jrheum.com](mailto:manuscripts@jrheum.com).

I want to thank everybody, and particularly Dr. Xu and all of you out there for this podcast, and please everybody, stay safe. And certainly, where social distancing is still in effect, please respect it.

Thank you.

**CX:** Thank you very much for having me. It's my great pleasure. Please also stay safe.

**ES:** Great.